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(JW)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/020,712 02/09/98 LEE

J 4577-50

EXAMINER	
LM02/0709	CHAWAN, V

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ART UNIT	PAPER NUMBER
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2741

DATE MAILED:

07/09/99

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

VBC

<b>Office Action Summary</b>	Application No. <b>09/020,712</b>	Applicant(s) <b>Lee et al.</b>
	Examiner <b>Vijay Chawan</b>	Group Art Unit <b>2741</b>

Responsive to communication(s) filed on \_\_\_\_\_.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 13-25 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 13-25 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

***Specification***

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not

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obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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5. The abstract of the disclosure is objected to because of the length. It exceeds 250 words in length. Correction is required. See MPEP § 608.01(b).

***Claim Objections***

6. Claim 13 is objected to because of the following informalities:

Line 14: the phrase "... the individual property information...", is not clear in that it does not make it clear as to what constitutes the individual property.

Claim 14, element (d): it is not clear as to what the applicant means by "calculating a prosody control parameter value other than a prosody control parameter included in the multimedia input information using a prosody processor".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 13 ,14, 17-18, 20, 22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holm et al., (5,850,629) and in view of Yokoyama (5,557,661).

As per claims 13 and 14, Holm et al., teach user interface controller for text-to-speech synthesizer for interlocking with multimedia comprising the steps of:

a multimedia information input unit for organizing text, prosody information etc., (abstract, fig.1);

a data distributor by each media for each media for distributing the information of said multimedia information input unit (fig.10);

a language processor for converting the text distributed by said media distributor by each media into a phoneme stream, presuming prosody information and symbolizing the presumed prosody information (Col.11, line 43 - Col.13, line 7);

a prosody processor for calculating a prosody control parameter value (Col.5, lines 58-67);

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a synchronization adjustor for adjusting a duration of each phoneme using the synchronization information (Fig.4, item 80);

a synthesis unit database for receiving the individual property information from said data distributor, selecting synthesis units adaptable to gender and age, and outputting data required for synthesis (Fig 4, item 84, Fig 8, Col.6, lines 52-59);

a signal processor for producing a synthesized speech using the prosody control parameter (abstract).

Holm et al., teach organizing input data of a text-to-speech conversion system for interlocking with multimedia using prosody analysis, but they do not specifically teach synchronizing this information with moving picture and picture information. Yokoyama, however does teach a system for coding and decoding moving pictures based on the result of speech analysis for interlocking with multimedia. It would have been obvious to one with ordinary skill in the art at the time of invention to incorporate the capabilities of coding and decoding moving picture based on the result of speech analysis as taught by Yokoyama into the system of Holm et al., because this would enable a user to efficiently coordinate the moving pictures and speech resulting from the prosodic analysis, thereby creating a composite which is high in quality.

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As per claims 15-18, 22, and 24-25, Holm et al., teach analyzing and outputting prosody information (Col.11, line 43 - Col.13, line 7, Fig.1, Col.4, lines 50-65, Fig.7).

9. Claims 19-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holm et al., (5,850,629) and in view of Yokoyama (5,557,661) as applied to claim 15 above, and further in view of Slager (5,313,522).

Holm et al., in view of Yokoyama teach a system and method for a text-to-speech conversion system for interlocking with multimedia, but do not specifically teach articulation using lip-shape, location information and duration information as per claims 19-21 and 23. Slager, however, does teach generating from a speech signal a moving visual lip image from which one can deduce speech content of the signal (abstract, title). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention, that by synchronizing speech and lip movement as taught by Slager and incorporating it into the system taught by Holm et al., in view of Yokoyama et al., an artisan with ordinary skill in the art can effectively combine the capabilities afforded by multimedia and be able to view the results with a greater degree of accuracy.

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***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Holzrichter et al., (5,729,694) teach speech coding, reconstruction and recognition using acoustics and electromagnetic waves.

Bloomstein (4,260,229) teaches creating visual images of lip movements.

Silverman (5,751,906) teaches a method for synthesizing speech from text and for spelling all or portions of the text by analogy.

Sharman (5,774,854) teaches a text to speech system comprising a linguistics processor and an acoustics processor.

Gasper et al., (5,111,409) teach authoring and use systems for sound synchronized animation.

Best (4,305,131) teaches dialog between TV movies and human viewers.

Henton (5,860,064) teaches a method and apparatus for automatic generation of vocal emotion in a synthetic text-to-speech system.

Kataoka (5,777,612) teaches a multimedia dynamic synchronization system.

Suzuki et al., (5,386,581) teach a multimedia data editing apparatus including visual graphic display of time information.

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Hara et al., (5,615,300) teach a text-to-speech synthesis with controllable processing time and speech quality.

Ohga et al., (5,677,993) teach an information processing apparatus using pointing input and speech input.

Farrett (5,636,325) teaches speech synthesis and analysis of dialects.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay Chawan whose telephone number is (703) 305-3836.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth, can be reached at (703) 308-4825.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

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(703) 305-9508 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703)305-3900.

Vijay Chawan  
July 5, 1999



Richemond Dorvil  
Primary Examiner